

816. Mr. Franklin B. Gowan, President of the Reading Railroad, Philadelphia.

817. Mr. Henry Phillips, Jr., of Philadelphia.

818. Mr. Henry Turner Eddy, C.E., Dean of the Faculty and Professor of Mathematics and Civil Engineering in the University of Cincinnati.

819. Mr. Cyrus F. Brackett, M. D., Professor Physics in Princeton College, N. J.

820. Prof. James Morgan Hart, of the University of Cincinnati.

821. Mr. Henry Armitt Brown, of Philadelphia.

822. Dr. Charles W. Siemens, of London.

823. Hon. M. Russell Thayer, Judge, Philadelphia.

824. Hon. Craig Biddle, Judge, Philadelphia.

825. T. Hewson Bache, M. D., of Philadelphia.

826. John H. McQuillen, M. D., of Philadelphia.

827. Geo. Strawbridge, M. D., of Philadelphia.

828. William Goodell, M. D., University of Pa.

829. Mr. Thos. Frederick Crane, Ph. D., Professor of Spanish and Italian in Cornell University.

And the meeting was adjourned.

Stated Meeting February 16th, 1877.

Present, 14 members.

Vice-President, Mr. E. K. PRICE, in the Chair.

Rev. Dr. Shields, Dr. Goodell, and Dr. McQuillen, newly-elected members, were introduced to the presiding officer and took their seats.

A photograph of Professor Frederick Prime, Jr., was received for insertion in the album.

Letters accepting membership were received from Mr. Henry Armitt Brown, dated Philadelphia, Feb. 6, 1877 ;

from Mr. Craig Biddle, dated 2033 Pine Street, Feb. 6, 1877; from Dr. Geo. Strawbridge, dated 1616 Chestnut Street, Feb. 7, 1877; from Mr. Henry Phillips, Jr., dated 304 S. Eleventh Street, Feb. 11, 1877; from Mr. M. Russell Thayer, dated Chestnut Hill, Feb. 8, 1877; from Prof. T. F. Crane, dated Cornell University, Ithaca, Feb. 8, 1877; from Dr. Charles W. Shields, dated Princeton College, Feb. 8, 1877; from Mr. George Stuart, dated 1528 N. Eighteenth Street, Feb. 12, 1877; from Dr. Thomas Goodell, dated Preston Retreat, Twentieth and Hamilton, Feb. 13, 1877; from Mr. W. V. McKean, dated [Ledger Office], Feb. 16, 1877; from Dr. J. H. McQuillen, dated 2100 Arch Street, Feb. 12, 1877.

Letters of acknowledgment were received from the University of Toronto (96, 98); and the Boston Public Library (96).

Donations for the Library were received from the Society at Lille; *Revue Politique*; London Nature; Essex Institute; American Chemist; Mr. A. R. Grote, Buffalo; Franklin Institute; Penn Monthly; American Journal of Pharmacy; Medical News and Library; House of Refuge; and Reading Railroad; Mr. Leo Lesquereux; War Department, U. S.; the Commissioner of Education, Washington; Mr. Sam. Scudder; Dr. Robert Peter; and the Mercantile L. Association, San Francisco, California.

The death of Dr. Anderson was announced by the Secretary, on authority of information received from Columbia College.

The death of Dr. Elisha J. Lewis, February 10th, 1877, at Philadelphia, aged years, was announced by Mr. J. S. Price.

The Secretary read a communication from Mr. Alex. E. Outerbridge, Jr., entitled "On the wonderful divisibility of metallic gold," giving a short description of an experiment made in the Assay office of the U. S. Mint, at Philadelphia.

Mr. Outerbridge electrotyped a film of gold upon a copper-plate, the difference of weight before and after the process, in two trials, showing the weight of gold deposited to be 1-10 of a grain, over a surface of two

hundred square inches ; which, if the gold were equally distributed in a continuous film over the whole surface, would give it a thickness of 1-980,400th part of an inch. A single grain of gold may be beaten out so as to cover seventy-five square inches with a thinness of 1-367,650th part of an inch.

The Secretary read a communication entitled "A measured section of the Palæozoic Rocks of Central Pennsylvania from the top of the Alleghany River Coal Series (on Broad Top) down to the Trenton Limestone, in the Lower or Cambro-Silurian System." by Charles A. Ashburner, Assistant on the Second Geological Survey of Pennsylvania.

Gen. Kane resumed the reading of his communication made at a recent meeting of the Society, describing his personal observations in Mexico, and discussing the ethnological movements taking place in that part of the American Continent.

Professor Cope exhibited and described some fossil remains of a Dinosaur, found by Dr. Newberry in 1870, in one of the cañons of the mountains of Utah, the first ever discovered in Triassic rocks in that part of the Continent. He compared them with others found by himself in 1874.

Professor Cope exhibited drawings of scratched figures on coal shales said to have been formed in an Indian mound near Davenport, Iowa, and now preserved in the Museum of the Davenport Academy of Sciences. One of these drawings represents a kind of zodiac, and the other numerous forms of animals, some of which are easily recognized, while those of others are unknown. These drawings are of such unusual excellence of design, and the accompanying symbols and letters have so Indogermanic an aspect, that doubts were expressed by some of the members present concerning their genuineness.

Pending nominations 830 and 831, and new nominations 832, 833 and 834 were read.

The resolution of the Finance Committee postponed at the last meeting was taken up, and on motion an appropriation

of \$1500 (fifteen hundred dollars) was made for continuing the printing of the Catalogue of the Library.

Gen. Kane read the following joint resolution offered to Congress.

Resolved, That the President be authorized to confer with the authorities of Mexico for the establishment of a joint commission having for its object the scientific exploration of the border States of Mexico and the United States; the operations of the commission to be conducted under the advice of the National Academy of Sciences. *Provided however*, that nothing herein contained shall be construed as to involve the United States for the payment of any claim which may grow out of such action or proceeding. Act, July 12, 1870.

On motion of Gen. Kane, it was resolved that this Society approves of the passage by Congress of the above Resolution; heartily commending the scientific exploration proposed, and the form of organization suggested.

And the meeting was adjourned.

Stated Meeting, March 2nd, 1877.

Present, 15 members.

Vice-President, Mr. PRICE, in the Chair.

Dr. Bache, a newly elected member, was presented to the presiding officer, and took his seat.

Letters accepting membership were received from Prof. C. F. Brackett, dated Princeton, Feb. 17, 1877; and Prof. Henry Turner Eddy, C. E., dated University of Cincinnati, Feb. 26, 1877.

A photograph for the album was received from Dr. Geo. W. Anderson, of the American Baptist Publication Society, 1420 Chestnut Street, Philadelphia.

A letter requesting a set of Proceedings for working pur-